Headquarters U.S. Air Force

Integrity - Service - Excellence

GCSS-AF

Summary

Capt Matthew Kuhn
GCSS-AF Test and Security Project Manager
ESC/NI2

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19 November 2003

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Agenda

- GCSS-AF Summary
- What is it?
- Why GCSS-AF, Business Benefits
- GCSS/GCCS Summit
- Hardware/Software Acquisition
- Level 4 Integration
- FY03 Accomplishments
- FY04 Outlook
- Contact Information

Purpose of GCSS-AF

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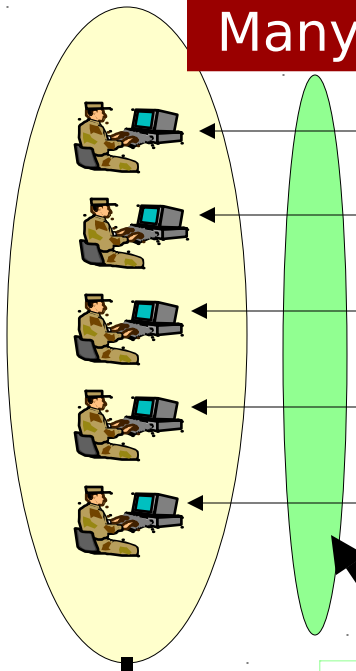
From
Many to Many--Stovepipes



Logistics Data Bases

Security Data Bases

Medical Data Bases

Manpower Data Bases

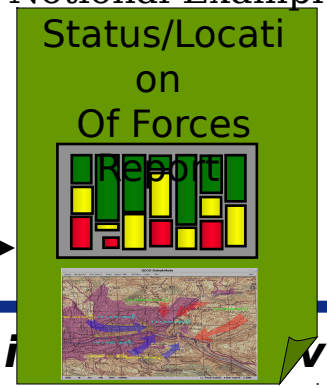
Personnel Data Bases

Various Methods Of Connection

Manual Combining Of Stovepipe Info

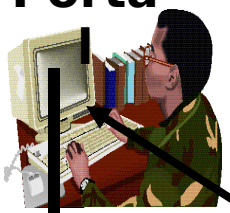
Days to Weeks To Generate

Notional Example



To
One to Many: Integrated

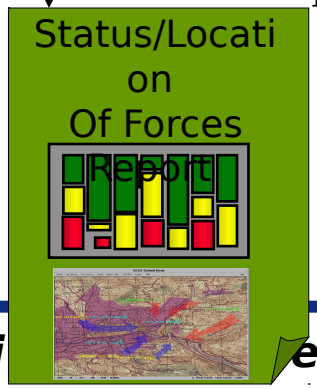
AF Portal



NIPRNET
SIPRNET

Near-Real/Real-Time Generation At Any Terminal Using Only a Web Browser

Notional Example



Log DBs

Fin DBs

Per DBs

Centralized GCSS-AF Servers

Enterprise Data Warehouse

A Case for EAI / Web Services – End The Tyranny of Point to Point Interfaces

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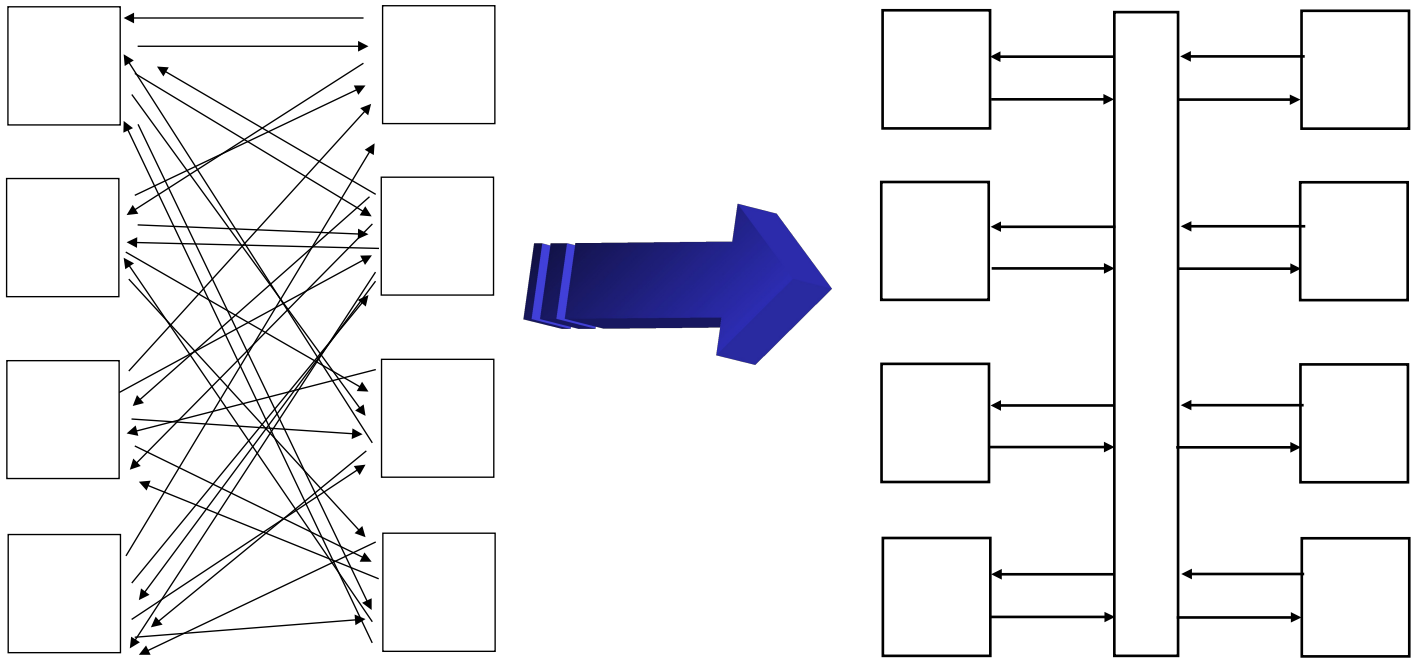
From <many to many> to <many to one>



Business Areas Supported

Combat Support

- Acquisition
- Chaplain
- Civil Engineering
- Communications
- Comptroller
- Contracting
- Health Services
- Legal
- Logistics Plans
- Maintenance
- Materiel Management
- Munitions
- OSI
- Personnel
- Public Affairs
- Quality and Manpower
- Safety
- Security Forces
- Services
- Space Support Teams
- Supply
- Transportation

640+ Systems

250+ Locations Worldwide

>20,000 concurrent Warfighters on-line

300,000+ Warfighters/Users Worldwide

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Why GCSS-AF?
AF Business Benefits

- Enterprise Consolidation of Capital Purchases – Scale efficiencies
  - Hardware & Software Products & Maintenance
  - Product Agnostic Mixed with Economic Pragmatism
- Common production platforms: Fixed Content (web sites) and Data Warehousing
- Operations and Maintenance Labor & Expertise
- Enterprise Engineering Enabling:
  - Interface Standards and Consolidation, Common Security Layer, Presentation (Portal) Standard and Consolidation,
  - Certification Foundation for All Functional Apps: SSAA, CoN, C4ISP, -- “Plug into GCSS-AF”
  - Enterprise Tuning / Load Balancing

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Consensus Leaving July GCSS/GCCS Summit

- **Field common arch across C2 and CS domains**
  - **Embody core architecture with preferred products, where possible & makes sense**
    - **Exploit economic efficiencies … commodities**
    - **Minimize integration costs**
    - **Provide common technical foundation to ease integration**
- **Allow deviations based on:**
  - **Operational necessities**
  - **Business cases**
  - **Emerging technologies**

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Product Acquisition

- Determine if need for an enterprise capability exists
- Product assessment done by Prime Contractor
  - Inputs from customer with enterprise in mind
- Once a product is selected:
  - Software
    - GCSS-AF with contracting negotiates for an AF enterprise license for the capability
    - “Free” to the rest of the AF
  - Hardware
    - Requirement is put out for bid
    - Select source based on best cost for the enterprise

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Integration Through Partnerships

- **Second Site with IL SPO … perhaps 3rd site with SG & DP**
- **Data strategy with C2 community … AC SPO**
- **Enterprise Information Management (EIM) with MSG/MM: We want to "push content" and they're focused on Knowledge Management (SG pilot)**
- **SIPRNET GCSS-AF/Portal with Air Intel Agency**
- **CS data to C2 World with DISA & JCS/J4**
- **CINC 57 pilots with 4 functionals, munitions in prod now**
- **Real Single Sign-On (SSO) with AFDS & AFPC**
- **Rationalizing data transfer to OLAP tools with EDW**
- **Other product exploitations with other communities**

CoN Streamlining through GCSS-AF

- Based off of Gen Croom's Letter
- Rewards applications that have designed for GCSS-AF integration
- If the criteria for Level 4 are met, applications will not need to get their own CoN
- Partnered with AFCA to bring this to reality

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Level 4 – Criteria 1

- ***Interactive Security***
  - **Interactive authentication and session establishment must be done via the GCSS-AF security services. This can be done with individual accounts that are protected by username/password or PKI that are administered in the GCSS-AF User Registry. The administration and control of the application access control is delegated back to the application owner via a web interface**
  - **The application must not have alternative interfaces that grant interactive access to logic and/or data hosted by the framework on behalf of the application**

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Level 4 – Criteria 2

- ***Process-to-Process Security***
  - **Application logic and/or data level process-to-process authentication between a process under operation control of GCSS-AF and external processes not under the control of GCSS-AF will be mutually authenticated by server certificates issued by DOD-PKI. This connectivity can not be implemented with passwords or self-signed certificates**

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Level 4 – Criteria 3

- ***Data Flows Review***
  - **In order to migrate and support the application, a high-level overview will be developed for each migrating application. Any data flows that are between an application running under the GCSS-AF CON and external environments will meet the DoD Discovery Metadata Standard regarding the documentation of technical connectivity, data content, frequency of transfer, volume of transfer and business purpose. This information will be entered in the GCSS-AF Repository in accordance with the Air Force CIO policy directive to register in the DoD Data Metatag Registry**
  - **The GCSS-AF team will register these data flows on behalf of the application in the DOD Metadata Registry to meet the CIO Policy Directive**

Level 4 – Criteria 4

- ***Operational Control***
  - **In order to be under the framework CON, the application logic and persistent data must be under the operational management and physical control of the framework operations group. GCSS-AF or the program may actually own the platform**

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What does it all mean?

- Aside from content and user role management, NO remote administrative access will be allowed
  - Read only access to log files is provided through ISQL
- No “backdoors” to access application
- Data registration with GCSS-AF will mean your data will also be registered with DoD
- GCSS-AF certifies to AFCA that your application does not need a CoN
- C4ISP process will be similar

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FY03 Accomplishments

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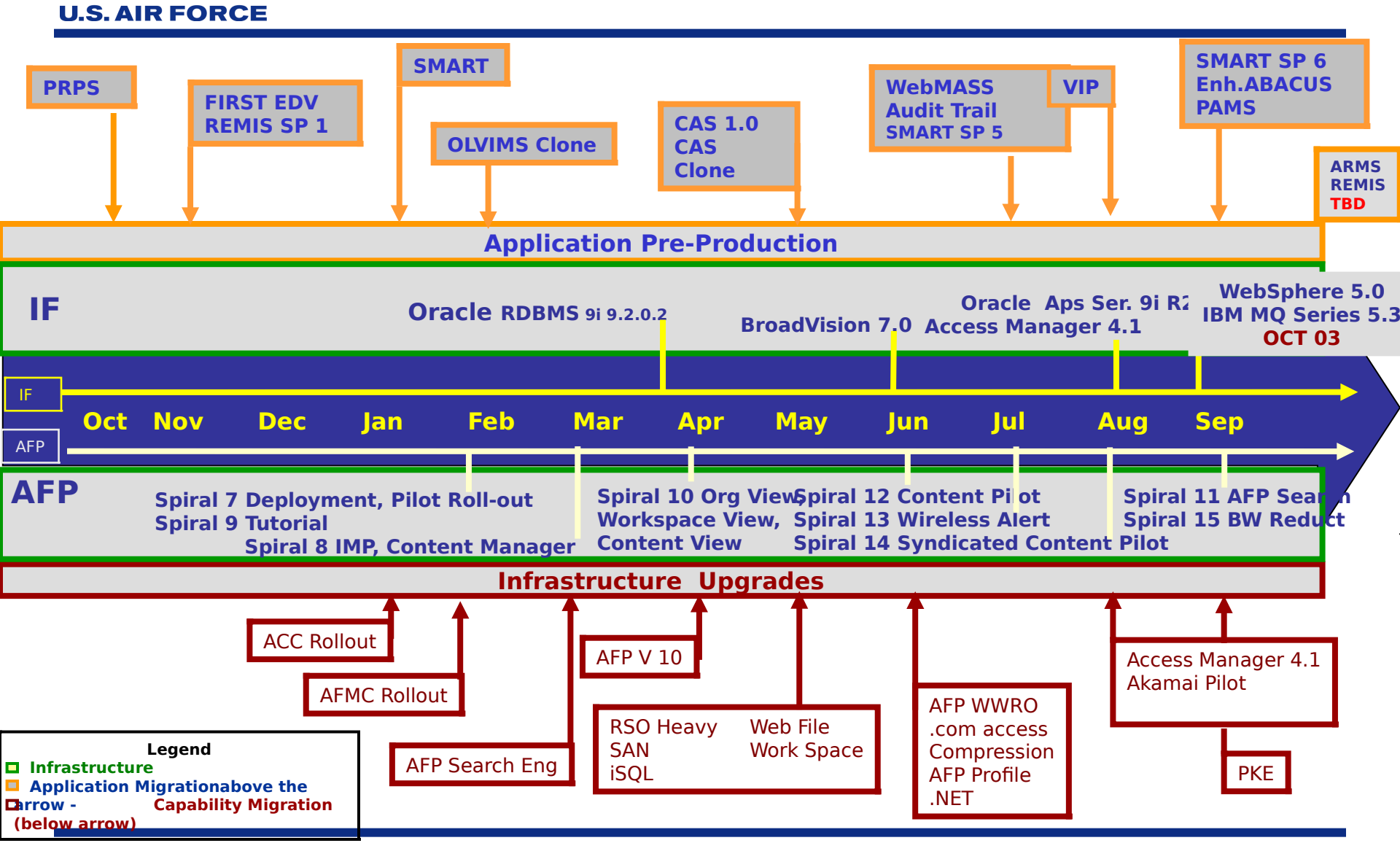
FY03 GCSS-AF Roadmap



Recent Accomplishments

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- .COM Access in partnership with DISA
- Self-registration / User Profile
- Autonomy
- On-Line Tutorial … more are coming
- Org/Base Information Architecture update
- Portal spirals / maintenance releases
- Akamai: AF LINK, HERBB, and Weather site
- Biztalk deployment
- SMART & CAS deployments
- CINC 57 Munitions Pilot/Web Service
- User data Web Service
- Several training sessions
- Portal Index
- Aircrew Resource Management System (ARMS)
- REMIS & PAMS

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IF /AFP Infrastructure Upgrades

FY 03

	Infrastructure Upgrades	
	Integration Framework (IF) FY 03 Upgrades	Scheduled Date
1	Oracle RDBMS 9i 9.2.0.2	4-Apr-03
2	BroadVision 7.0	13-Jun-03
3	MicroSoft .NET	1-Jul-03
4	Access Manager 4.1	30-Sep-03
5	Oracle Application Server 9i R2 9.0.3	15-Sep-03
6	IBM MQ Series 5.3	20-Oct-03
7	IBM WebSphere 5.0	20-Oct-03
	Air Force Portal (AFP) FY 03 Spirals	Scheduled Date
1	ACC / AFMC Pilot Roll-out	7-Feb-03
2	Spiral 8 IMP, Content Manager	13-Mar-03
3	Spiral 9 Portal Tutorial	7-Feb-03
4	Spiral 10 Organization, Workspace and Content View	21-Apr-03
5	World Wide Roll-Out Planning / Start	30-Jun-03
6	Spiral 11 AFP Robust Search	22-Sep-03
7	Spiral 12 Content Pilot	TBD

GCSS-AF

Application / Capability Migration FY 03

		Application / Capability Migration	
		System	Staging Start
DONE	1	Purchase Request Process System	16-Oct-02
	2	Financial Information Resource System Acquired Accounting	12-Nov-02
	3	OLVIMS Failover / Horizontal Clonning	10-Feb-03
	4	SMART	9-Jan-03
	5	ACC / Langley AFP Roll-out	15-Jan-03
	6	AFMC / WPAFB AFP Roll-out	15-Feb-03
	7	Air Force Portal Version 11 spiral 1(Search)	26-Mar-03
	8	BANTU Instant Messenger	1-Apr-03
	9	Air Force Portal Version 10	25-Apr-03
	10	Reduce Sign On Application	7-May-03
	11	Storage Area Network Upgrade - EMC / Veritas Certification	13-May-03
	12	Air Force Portal Version 9 & 10.2 (Tutorial)	19-May-03
	13	iSQL Database Access Service	23-May-03
	14	Web File View Service	23-May-03
	15	Combat Ammunitions System 1.0	13-May-03
	16	CAS 1.0 Horizontal Cloning	13-May-03
	17	World Wide Roll Out Planning / Execution Start	15-Jun-03
	18	GCSS-AF DOT COM - BlueCoat	30-Jun-03
	19	Air Force Portal Version 10.1 (Profile)	9-Jul-03
	20	.NET	1-Jul-03
	21	SMART Spiral 5	8-Jul-03
	22	Web MASS	18-Jul-03
	23	Autonomy Advanced Search Engine	8-Aug-03
	24	REMIS	18-Aug-03
Inwork	25	HW Compression Solution - Appcelera	3-Sep-03
	26	CEIF Fielding	30-Aug-03
	27	Akamai Pilot	30-Aug-03
	28	PMEL Automated Management System	9-Sep-03
	29	SMART Spiral 6	10-Sep-03
	30	Enhanced ABACUS	29-Sep-03
	31	PKE enabled	30-Sep-03
	32	Audit Trail	TBD
	33	Live Portal Metrics w/ COGNOS	TBD
	34	Congressional Tracking System	TBD
	35	ARMS	TBD

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RSO – In production

Reduced Sign-On : In Production			
Heavy			"Lite"
1	ACCRSS	1	AFEMS
2	AMCRSS	2	AFPC Secure
3	EUSAFERSS	3	ECATS
4	PACAFRSS	4	EDW
5	SESS	5	ETCA
6	FIRST	6	G081
7	OLVIMS	7	ITAM
8	SMART	8	MP&E
9	CAS	9	MyPay
10	LIN/CIRF Gadgets	10	RAMPOD
11	Fleet Asset Status Gadget	11	SCCOP
12	Global Freeze Gadget	12	Tricare On-line
13	Fit2Win	13	Public Affairs Portlet

RSO Heavy Apps in Pre-production : AIMWTS, AFPC, AFWay, EFIT, ITSC, PEPP, SCRA

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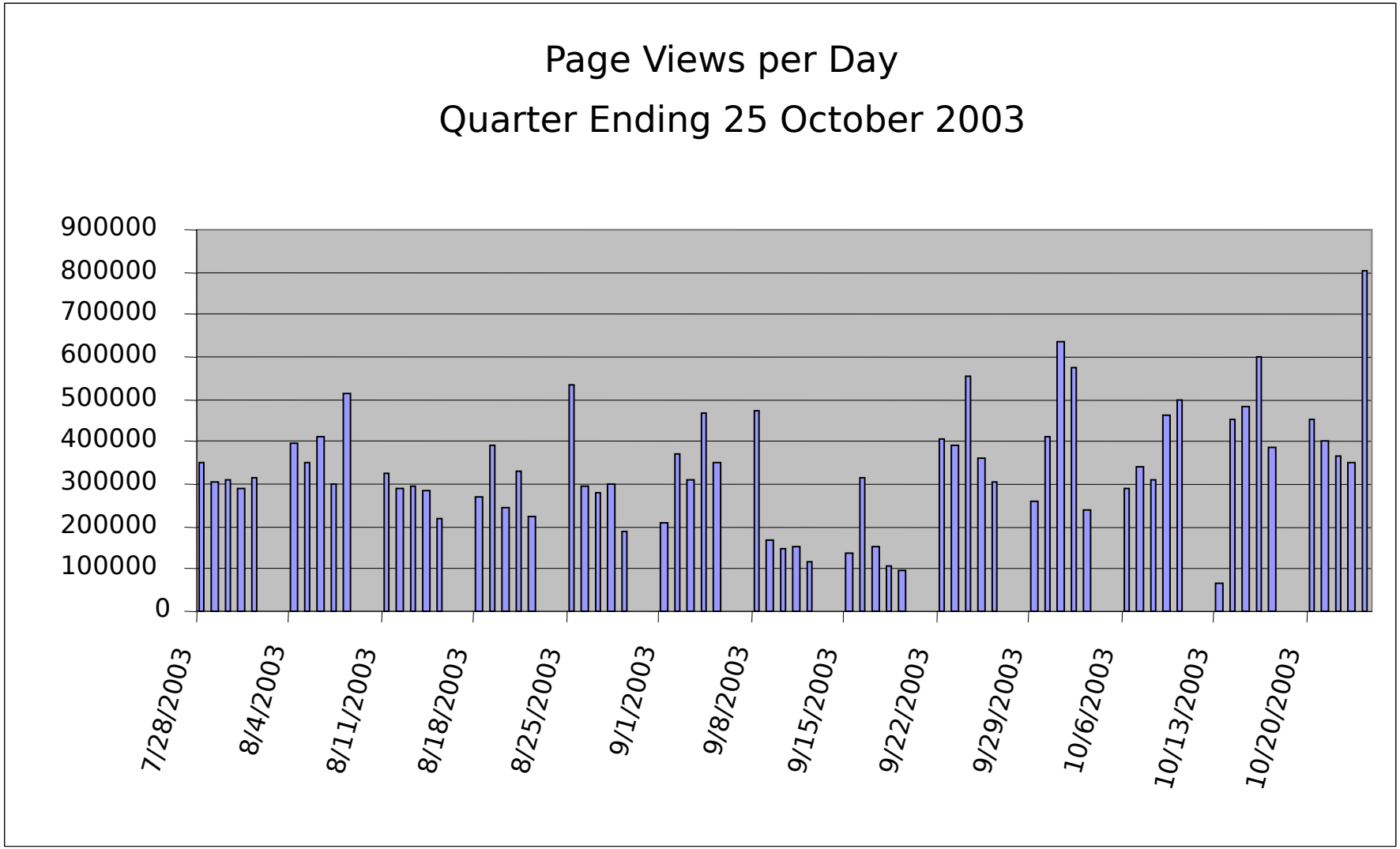
AFP 4.0 Availability



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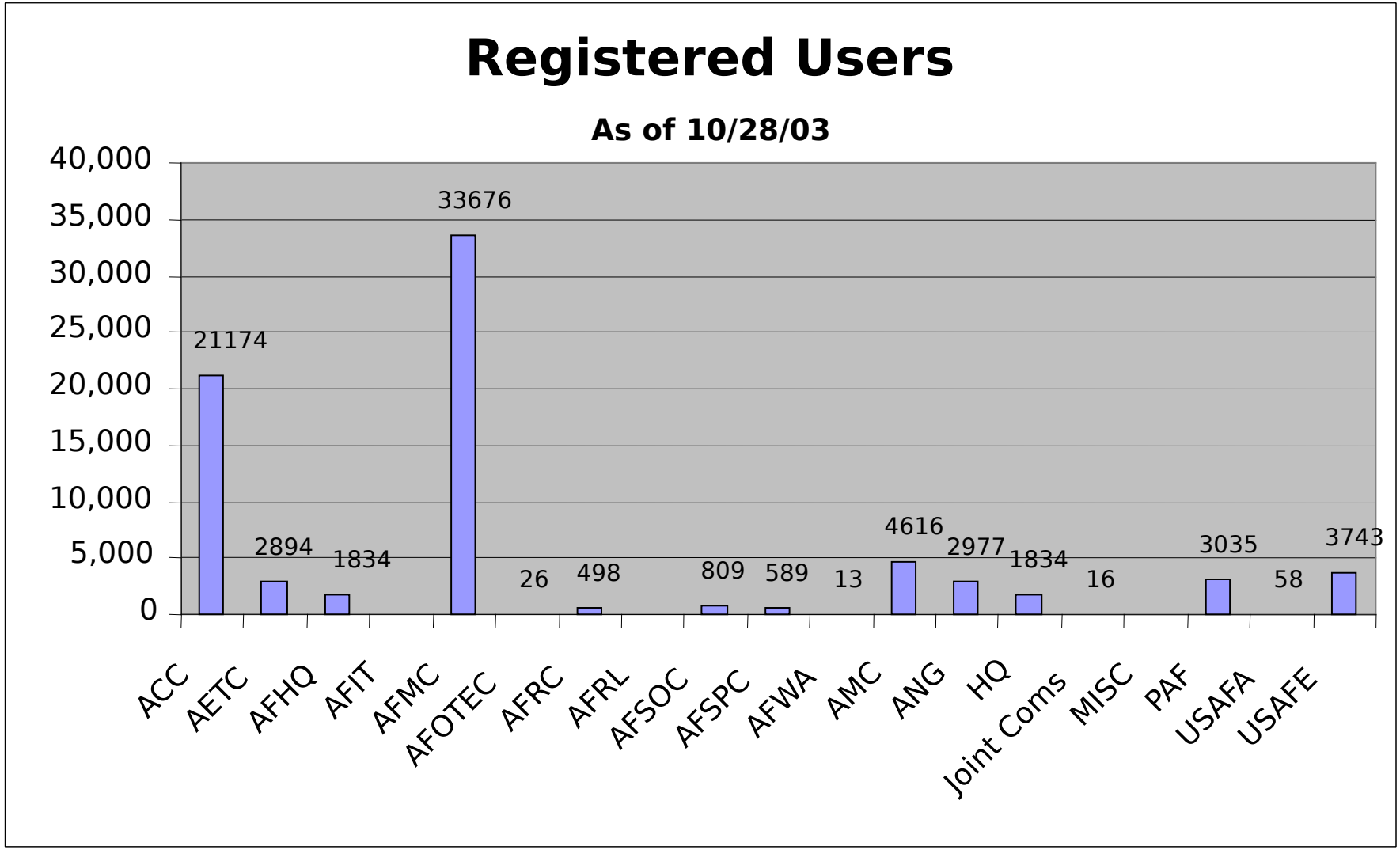
Air Force Portal Users



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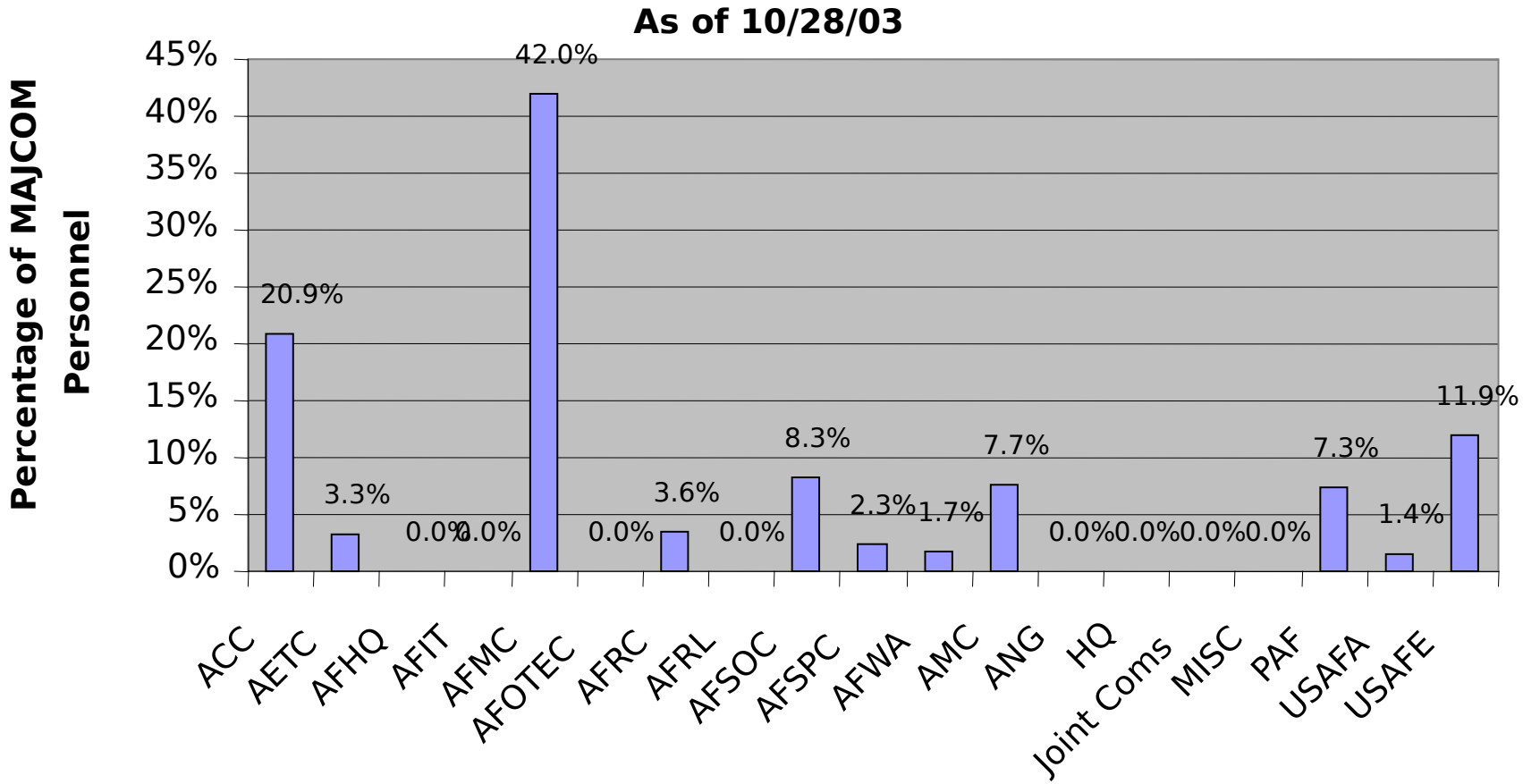
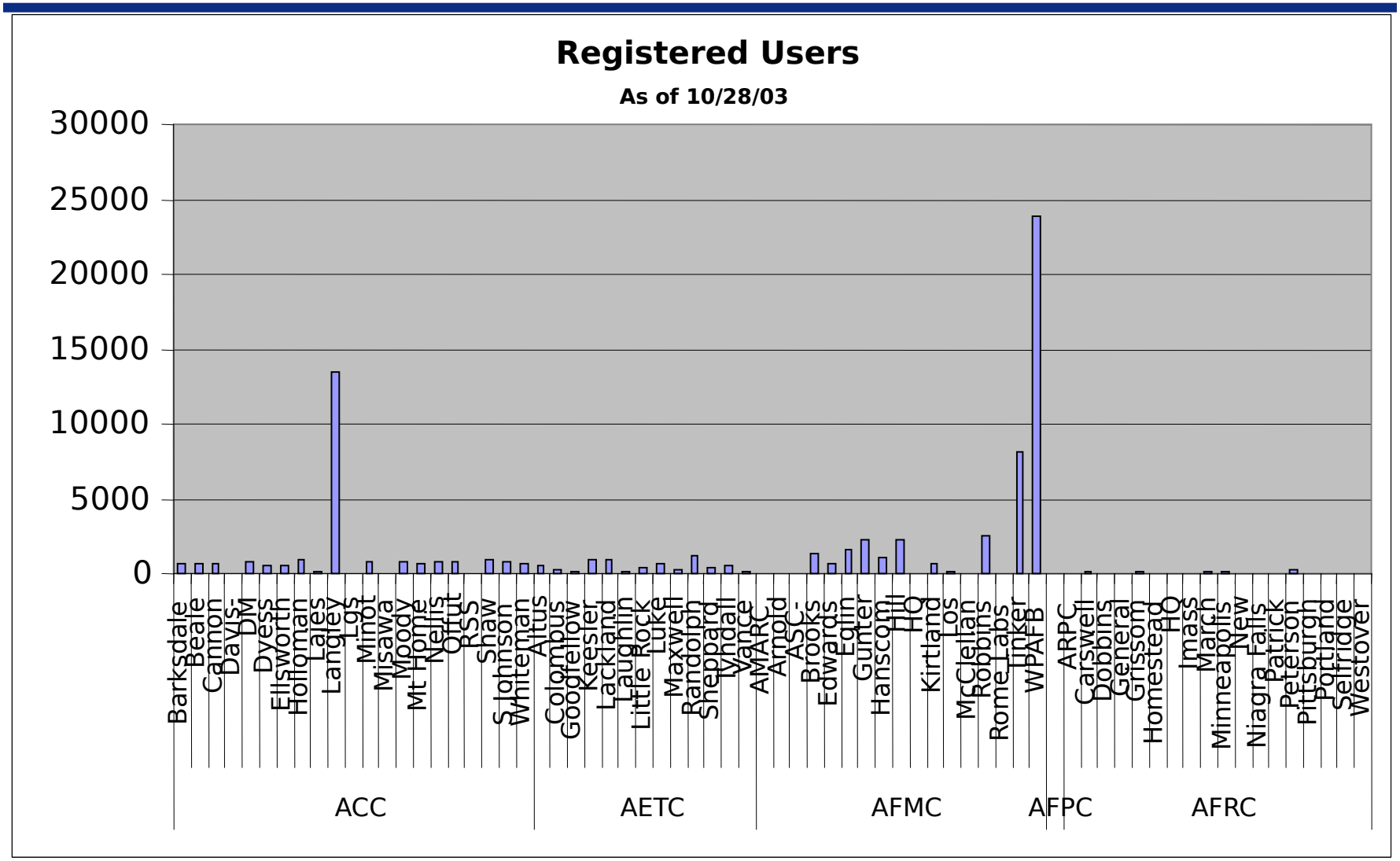
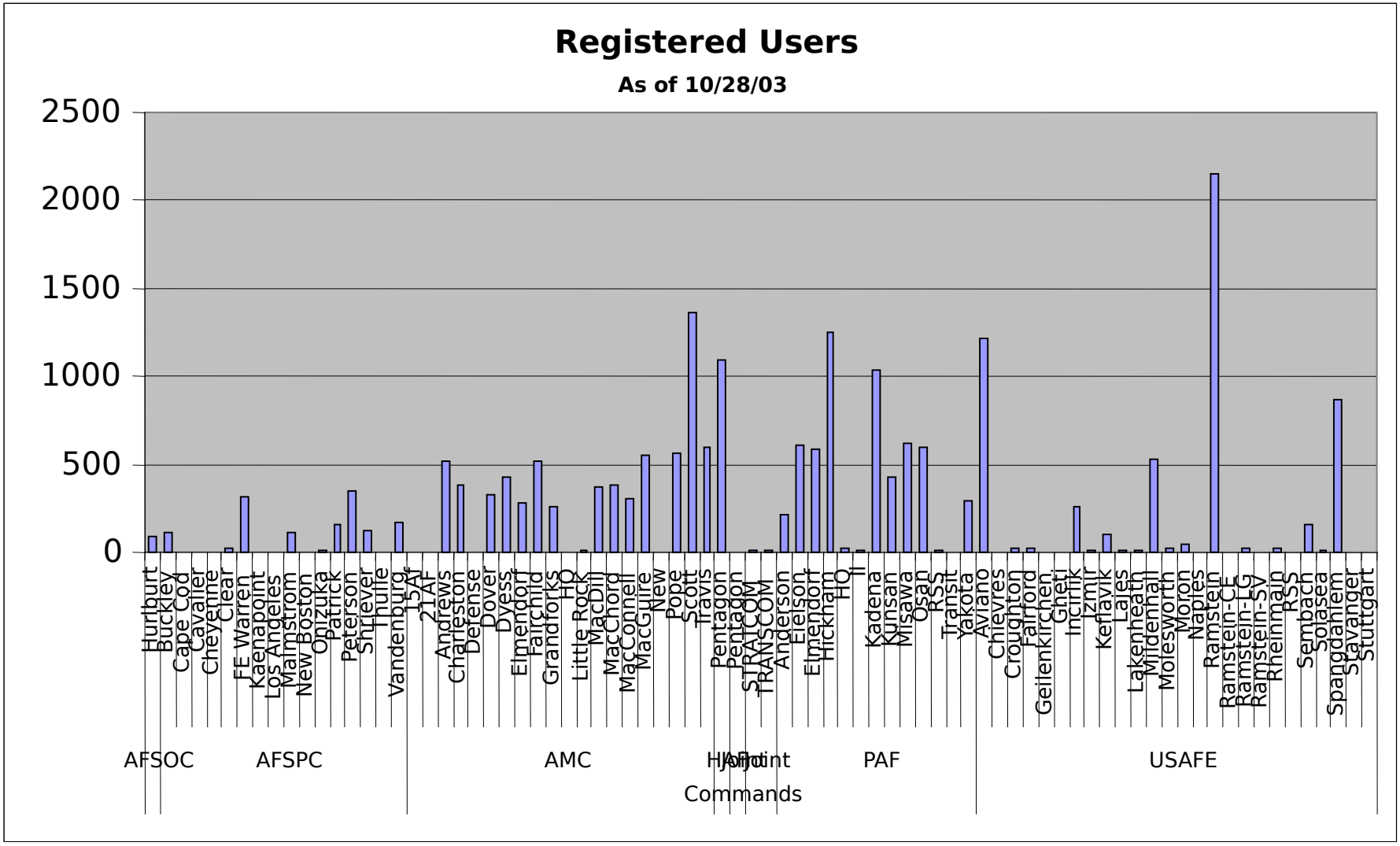


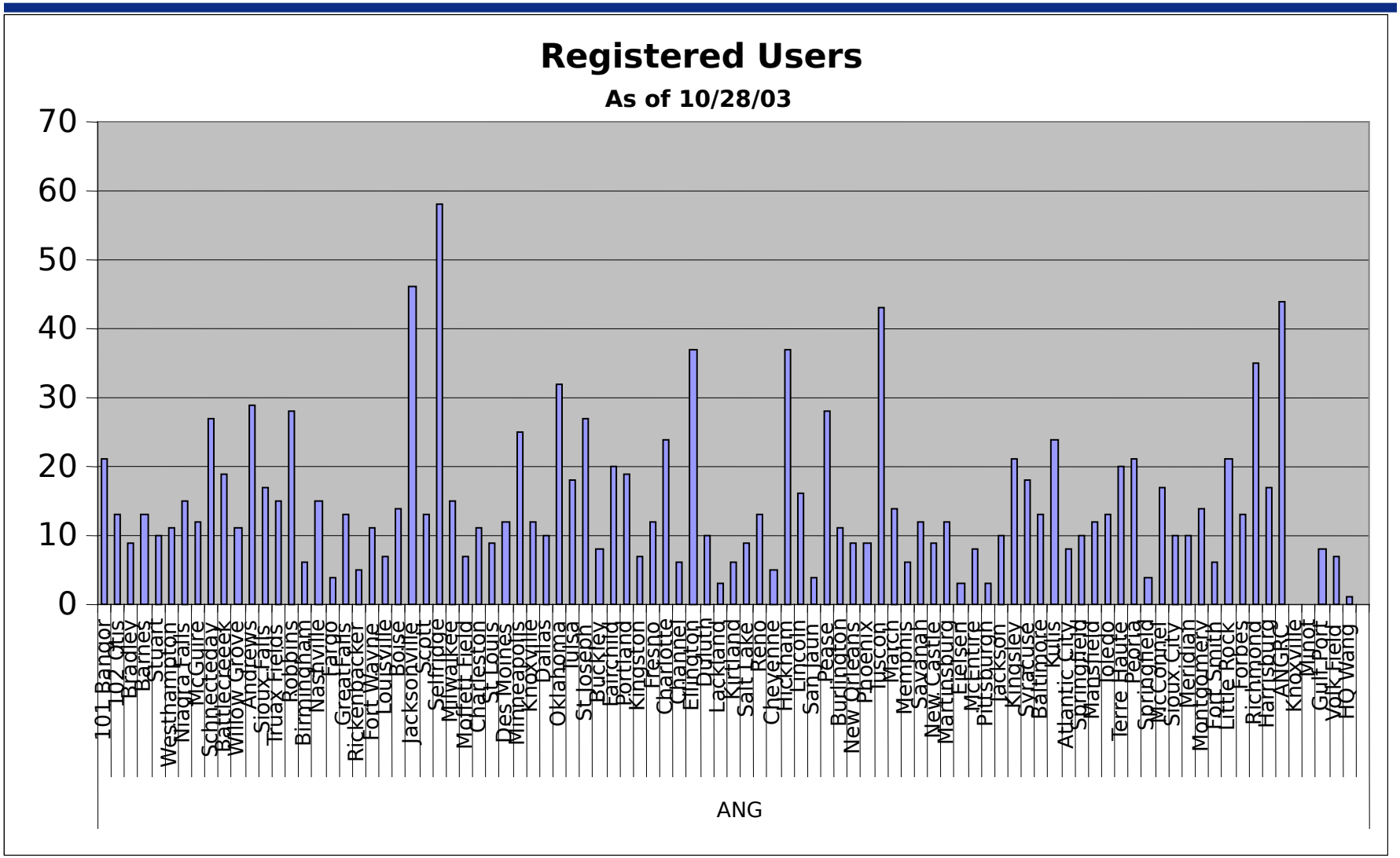
Air Force Portal Users



Air Force Portal Users



Air Force Portal Users



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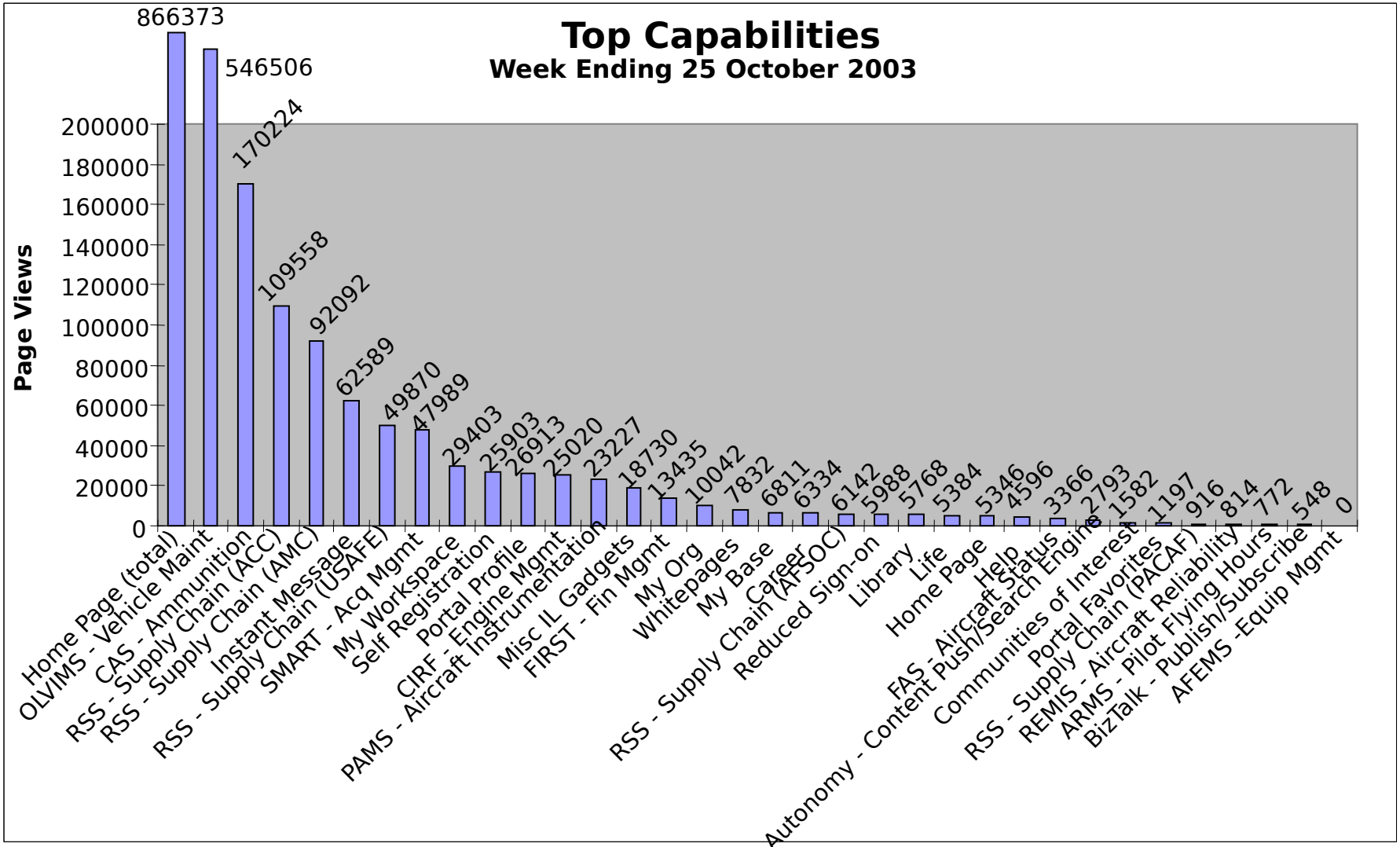
Top Capabilities



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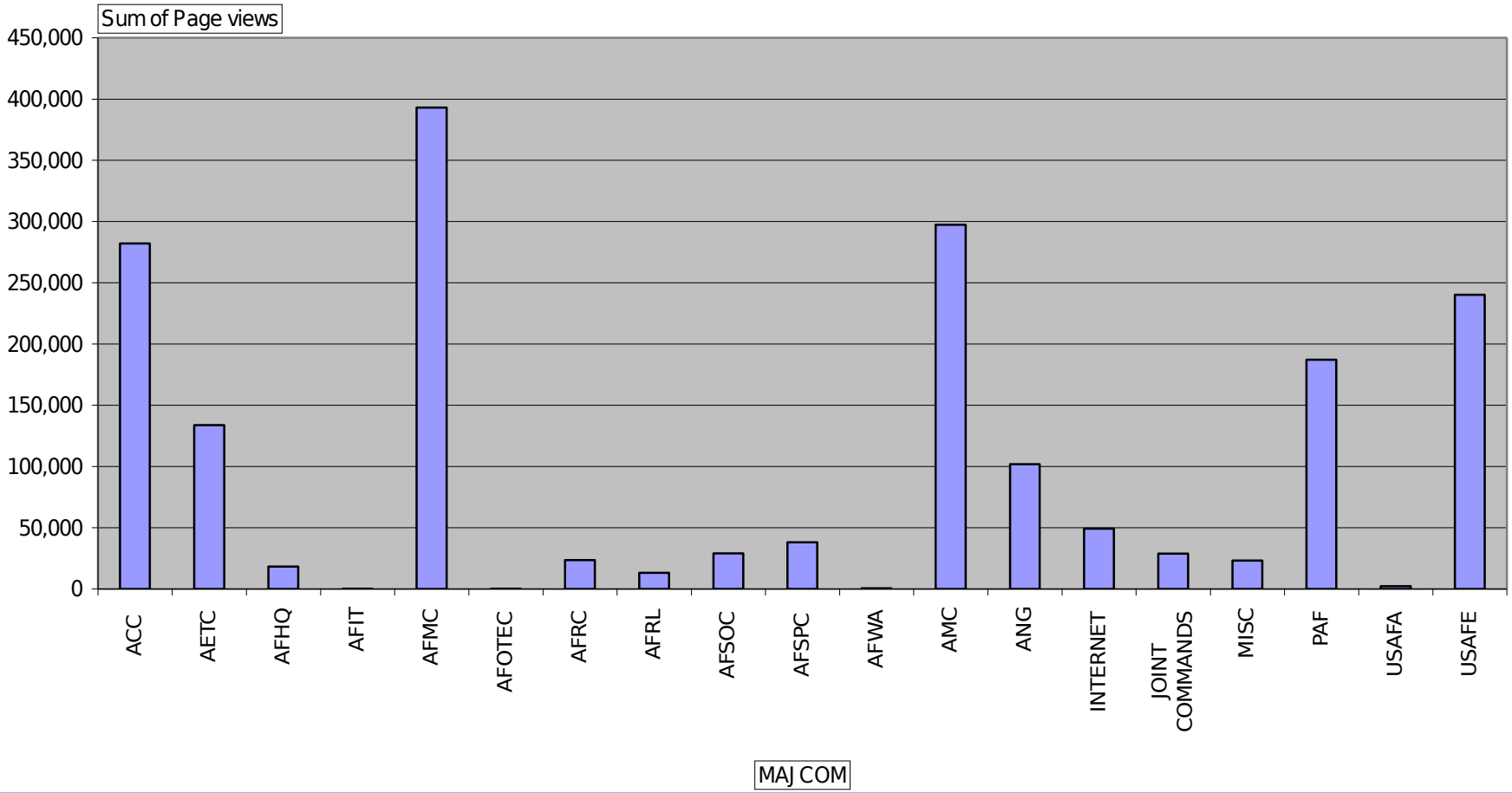
Page Views Per MAJCOM

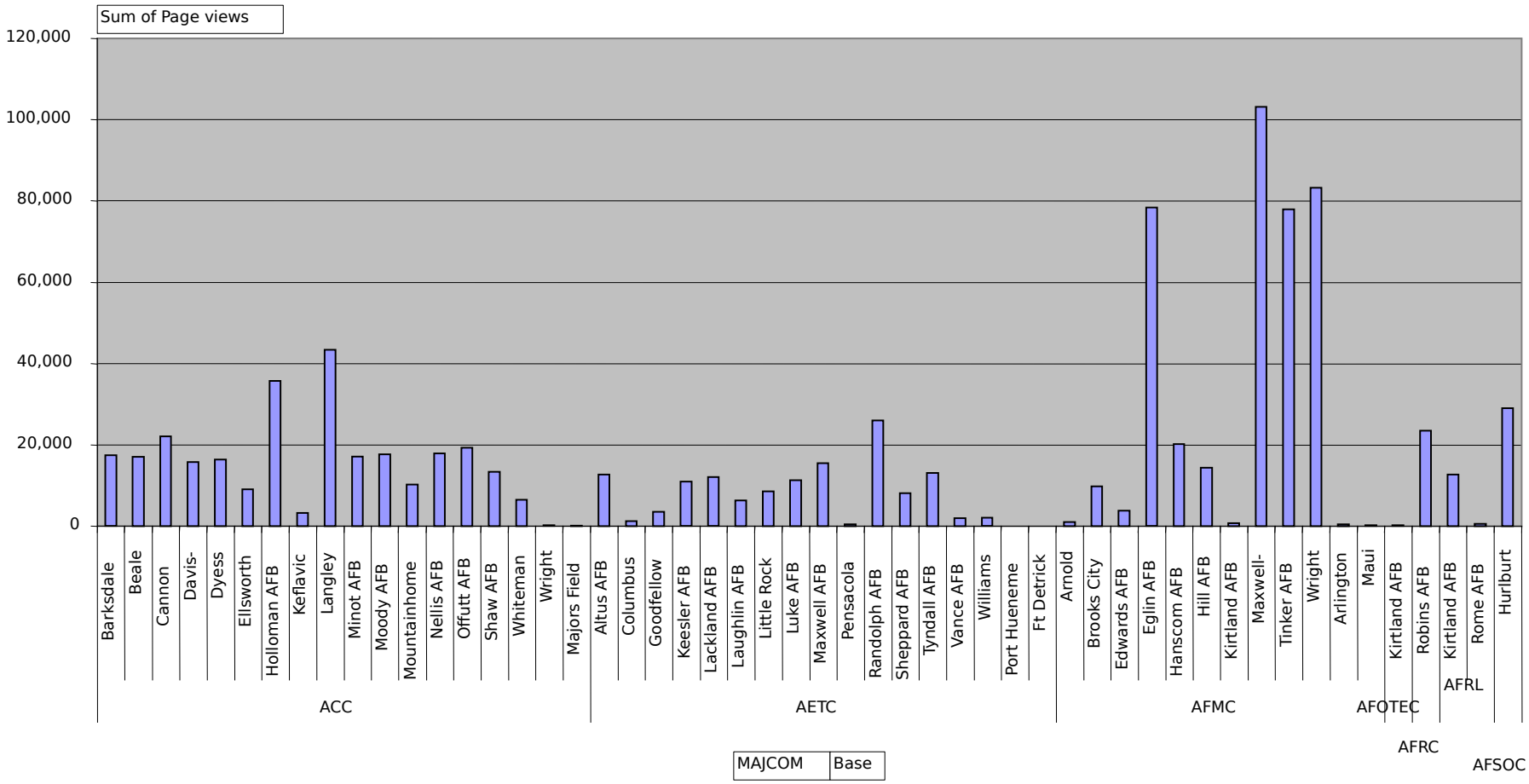
Portal Page Views per MAJ COM
Week Ending 25 October 2003



Page Views Per Base

Pageviews per Base

Week Ending 25 October 2003



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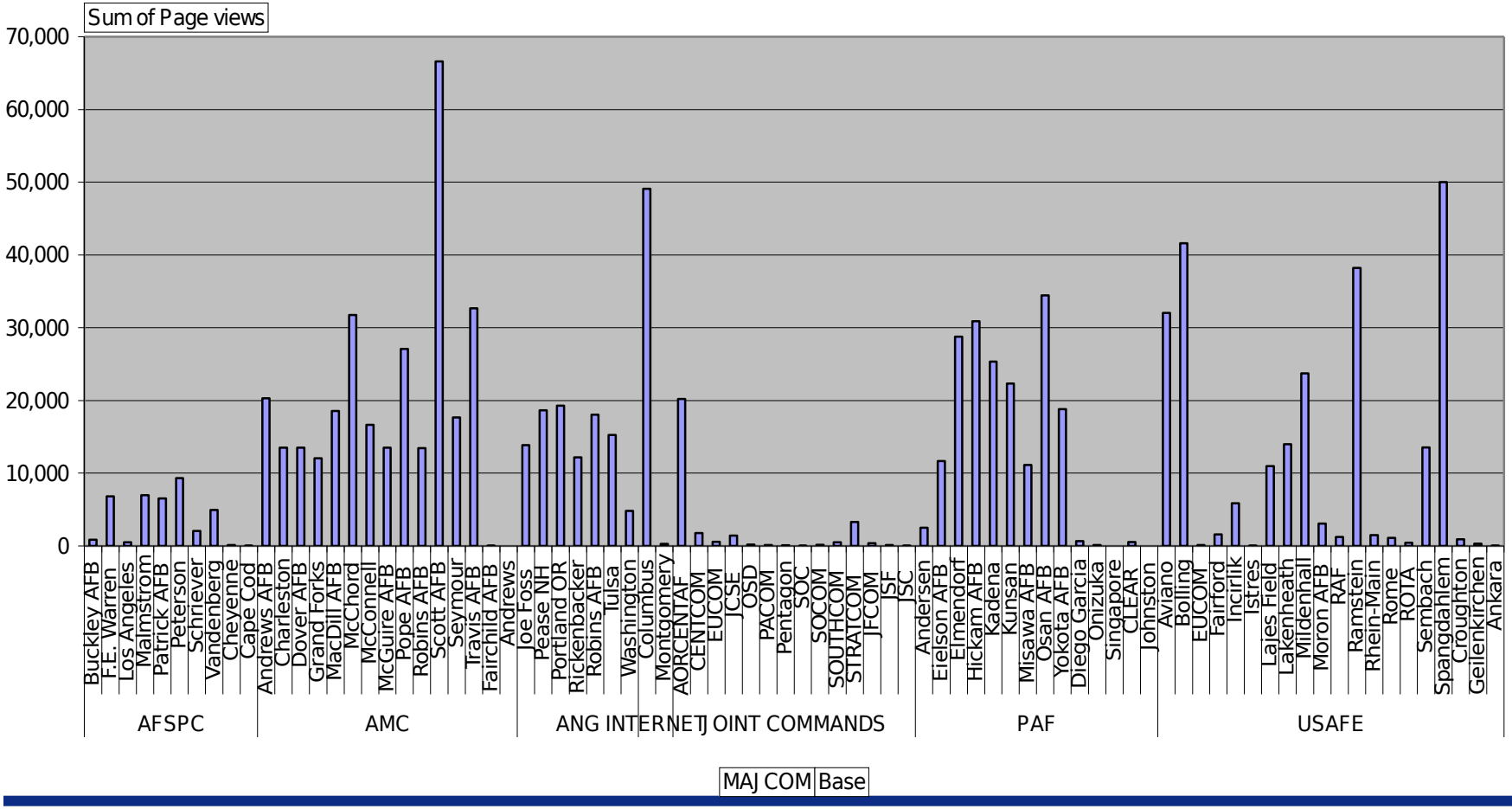

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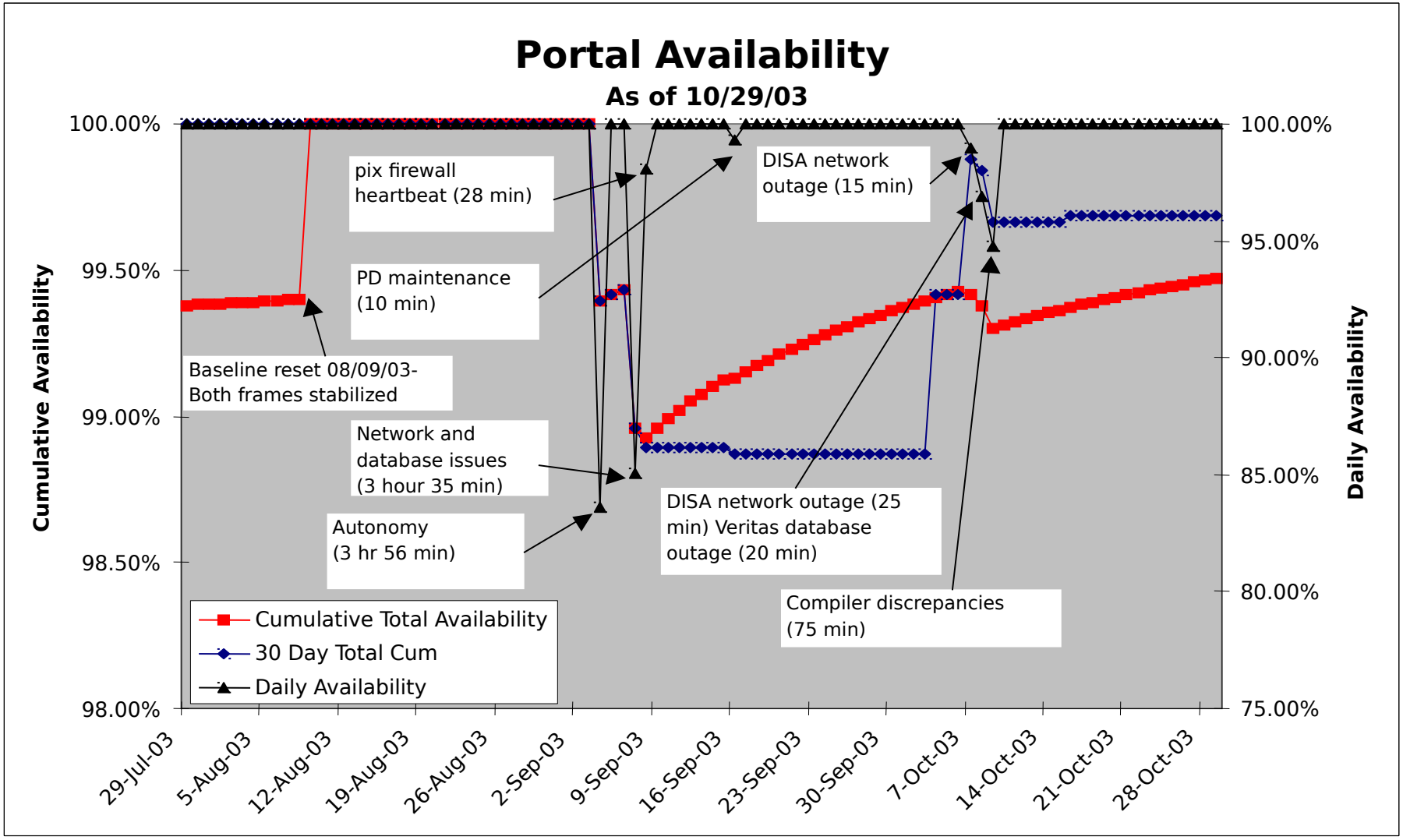
AFP 4.0 Availability



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FY04 Plans

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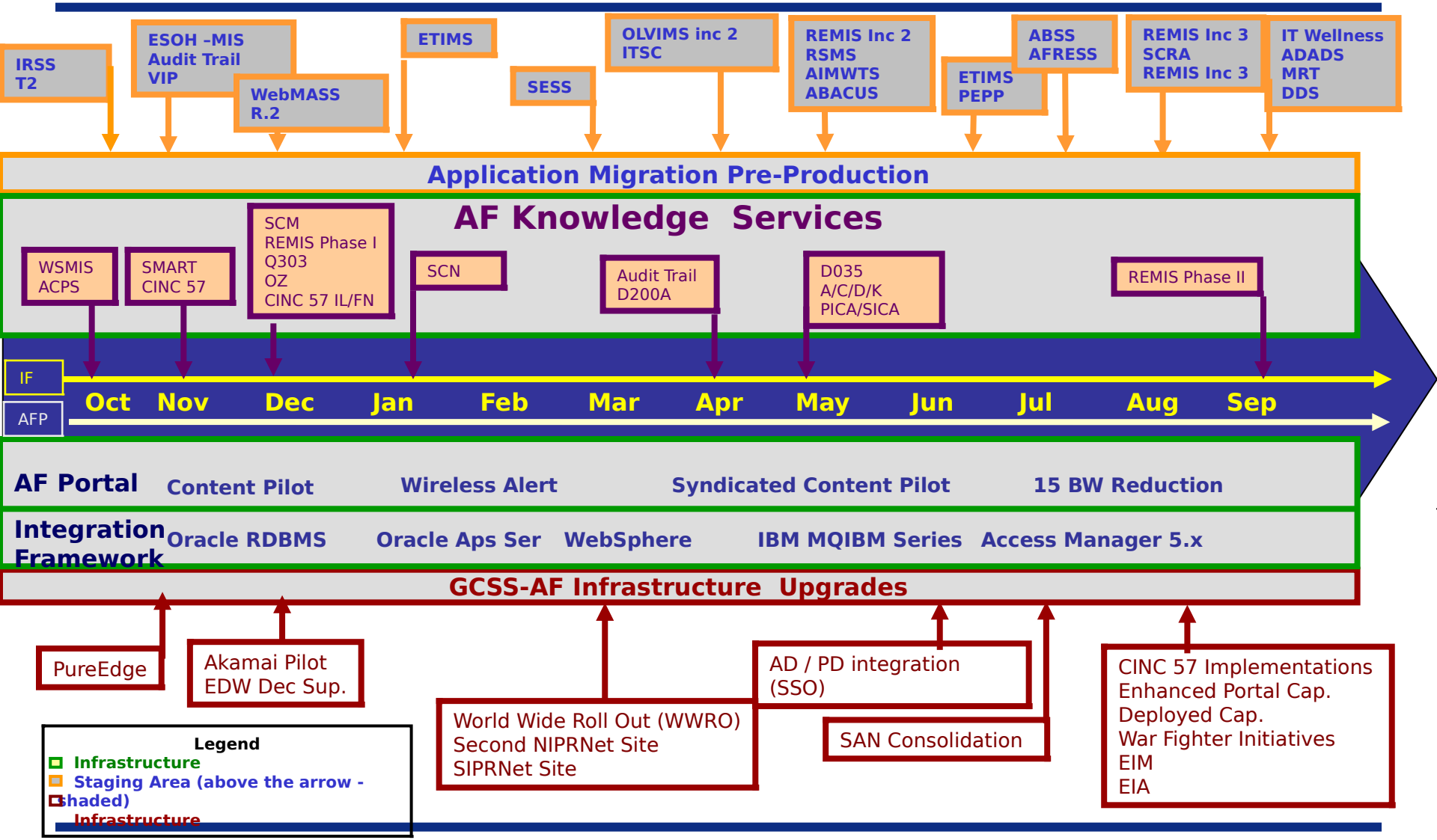
FY04 GCSS-AF Roadmap



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Early FY04 Activities

- Workspace customization
- Import internet favorites
- Public Key Enablement

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PK-E CAC Authentication

Critical Success Factors:

- Coordination and support of the PKI SPO, AFCA, JITC, AFIWC, DISA
- Support of remote testing/development over the Internet

Accomplishments:

RFP	15 July 2003
Proposal Submitted	25 July 2003
Task Awarded	8 September 2003
Task Kickoff Meeting	8 September 2003

Schedule

Design Review	3 October 2003
Phase I (BlueCoat on NIPRNET)	26 November 2003
Phase II (Akamai on NIPRNET)	13 February 2004
Phase III (BlueCoat on Internet)	28 February 2004

Early FY04 Activities

- Workspace customization
- Import internet favorites
- Public Key Enablement
- **Password Reset**
- **Active Directory / Access Manager integration**
- **Collaborative Tools / EIM: partnership with Col Cox**
  - **PureEdge link up**
- **Near real-time metrics with COGNOS**
- **Performance monitoring with TeamQuest**
- **End-to-end performance measurement**

What is End-to-End Performance?

- **End-to-End Performance**
  - **Deals with the performance concepts surrounding data transaction between the end client and backend origin servers.**
  - **Typically results in quantitative measurements such as:**
    - **Time: elapsed time between a client-side request and when data is delivered back to the requesting client.**
    - **Bandwidth: resources of bandwidth utilized at sections of, or throughout the entire, delivery route.**
    - **Rendering: encompassing data segmenting and computing resources required at delivery to render the response as useful information.**

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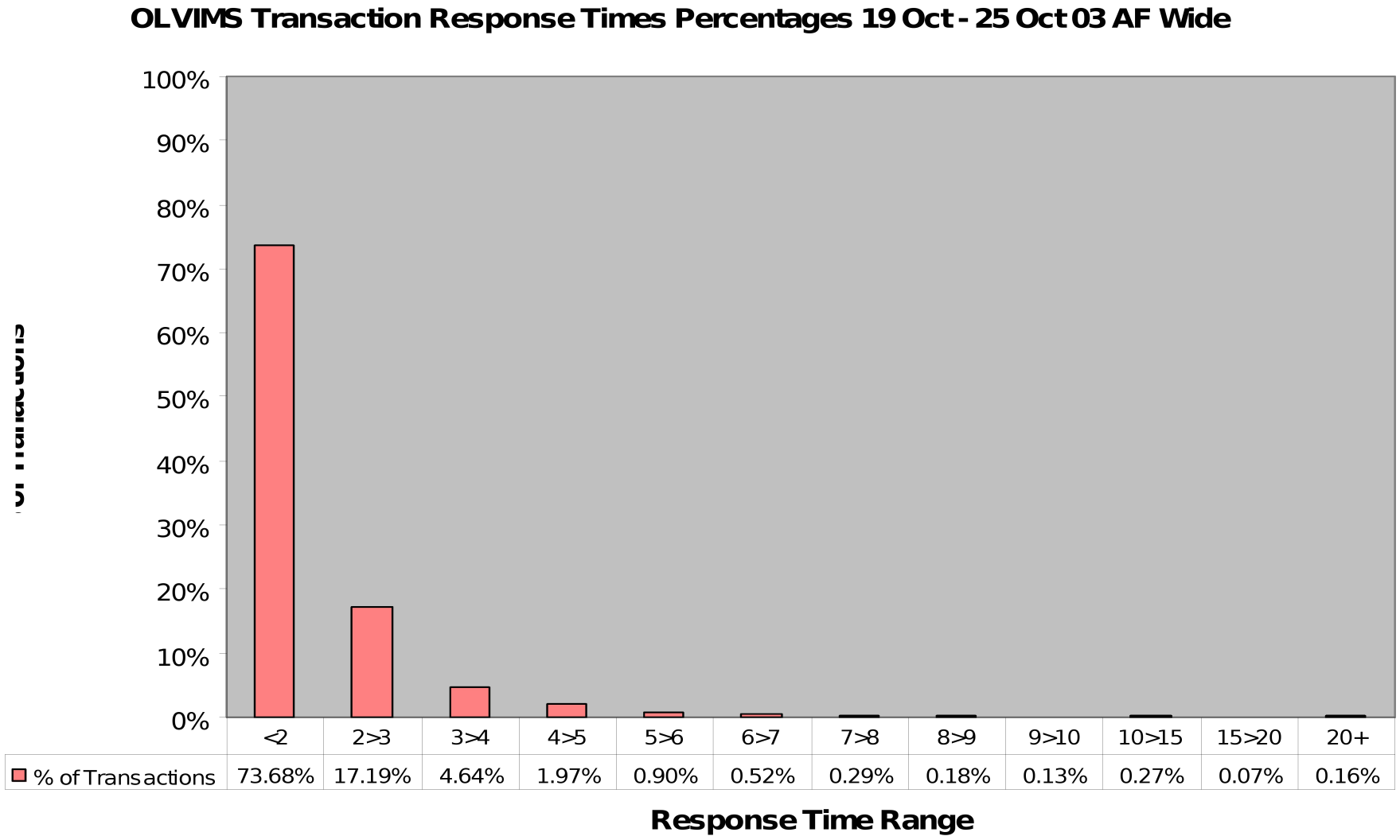
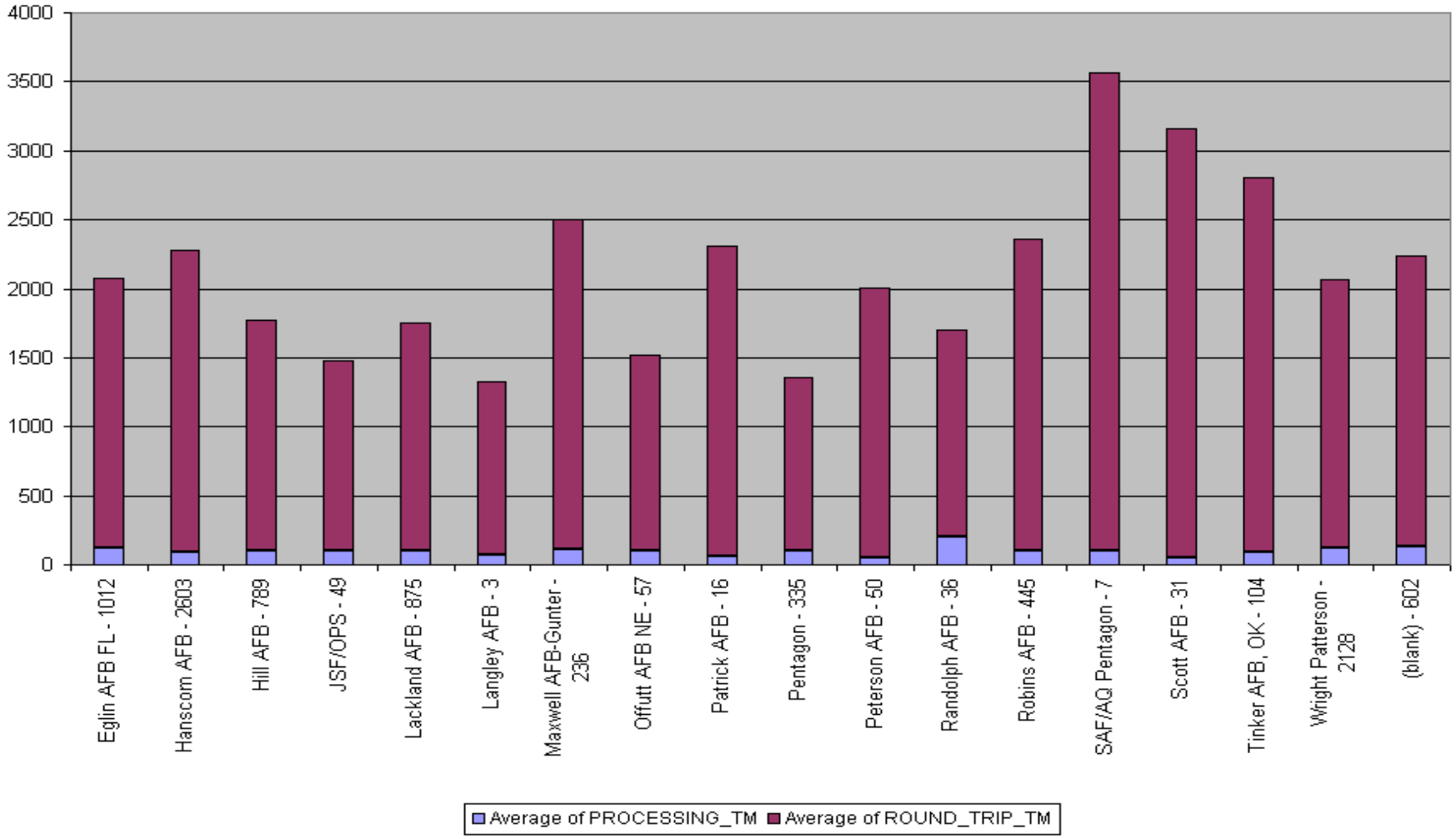
OLVIMS Response Time



SMART Response Times by Base in milliseconds

3 - 14 Oct 03, Number of Samples: 12,776



SMART Response Times by Function in milliseconds

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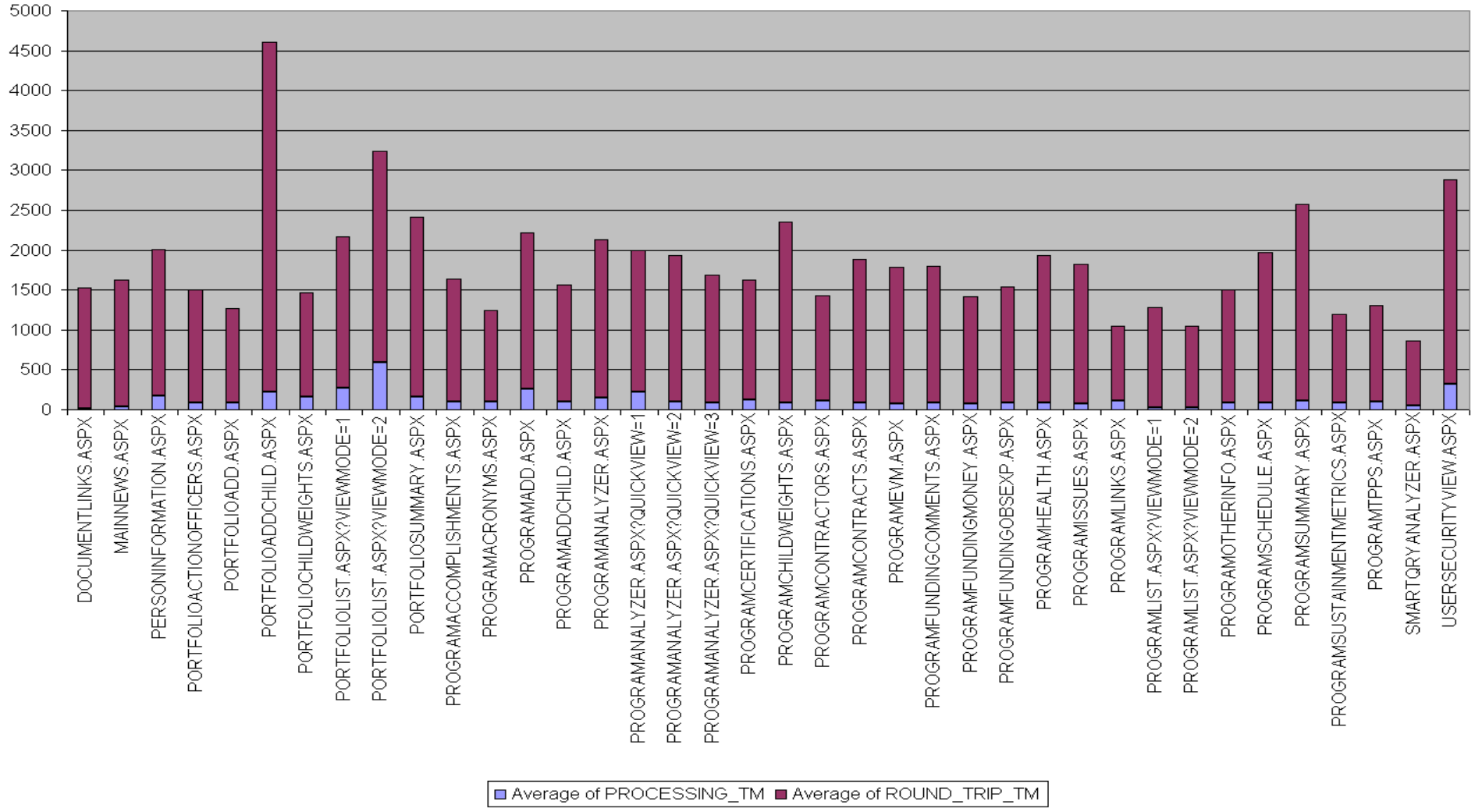

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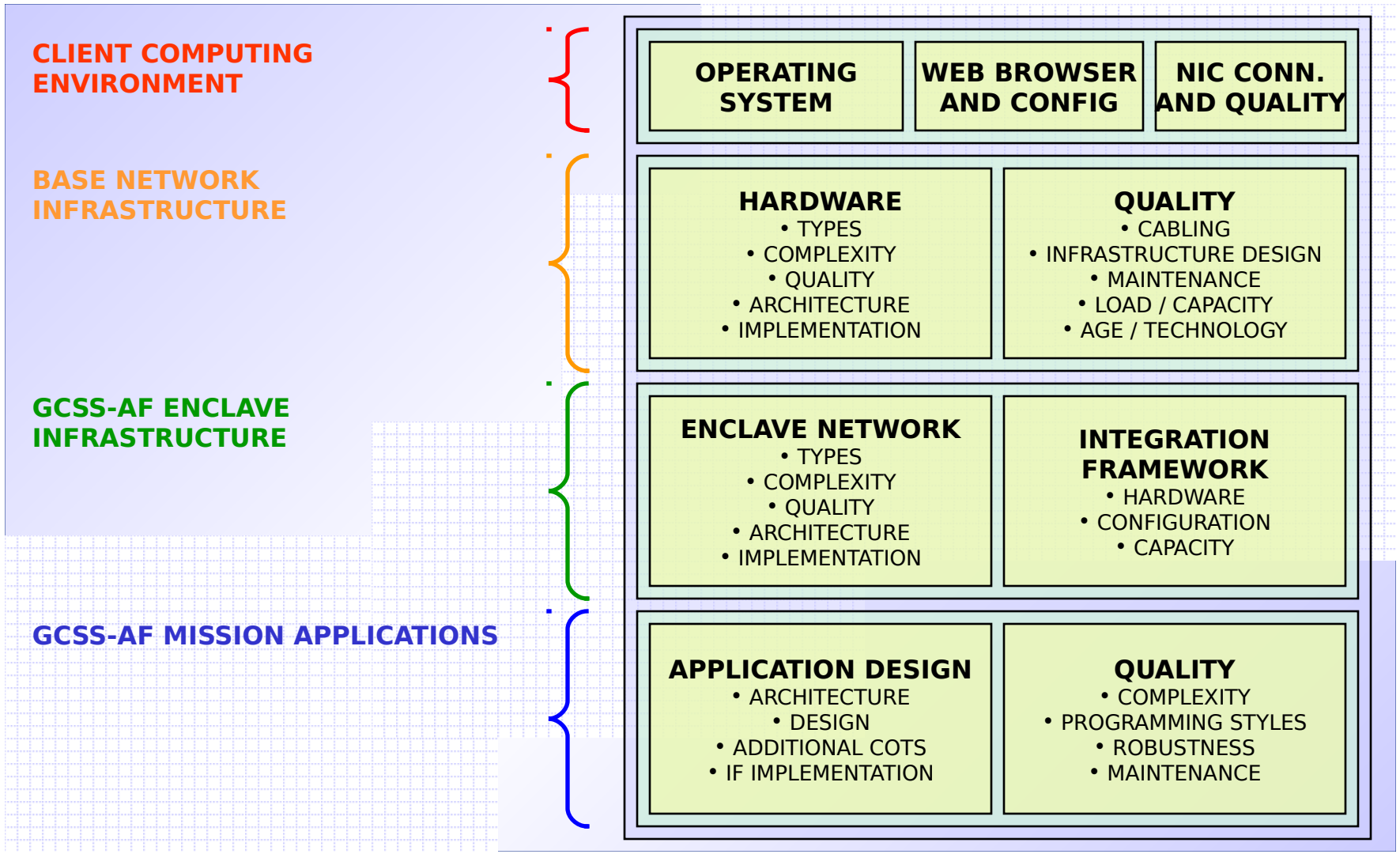
End-to-End Performance with GCSS-AF Visual Layer



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IF /AFP Infrastructure

FY 04

	FY 04 Planned Infrastructure Upgrades	
	Integration Framework (IF) FY 04 Upgrades	**Scheduled Date**
1	Oracle RDBMS	Planning Stage
2	BroadVision	Planning Stage
	Enterprise Application Interation (EAI)	Planning Stage
3	MicroSoft .NET	Planning Stage
4	Access Manager	Planning Stage
5	Oracle Application Server	Planning Stage
6	IBM MQ Series	Planning Stage
7	IBM WebSphere	Planning Stage
	Air Force Portal (AFP) FY 04 Spirals	**Scheduled Date**
1	Spiral 13 Wireless Alert - Candidate	18-Jul-03
2	Spiral 14 Syndicated Content Pilot - Candidate	15-Aug-03
3	Spiral 15 Bandwidth Reduction - Candidate	12-Sep-03
4	Spiral x	Planning Stage
5	Spiral x	Planning Stage
6	Spiral x	Planning Stage
7	Spiral x	Planning Stage
8	Spiral x	Planning Stage
9	Spiral x	Planning Stage

GCSS-AF Application Migration FY 04

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Sorted by Staging Area Start Date

	FY 04 Planned Application Migration		
	System	Acronym	Staging Start
1	Information & Resource Support System	IRSS	14-Oct-03
2	SAF/FMBIS Tuition Rates Submission Tool	T2	23-Oct-03
3	Environmental Safety and Occupational Health Management Information System	ESOH-MIS	3-Nov-03
4	Audit Trail	AT	20-Nov-03
5	Visible Inventory Process	VIP	20-Nov-03
6	WebMASS Release 2.x	WebMASS	16-Dec-03
7	Enhanced Techdata Management Information Systems (Spiral 1)	ETIMS	1-Jan-04
8	SMART Spiral 7	SMART sp 7	7-Jan-04
9	Suicide Event Surveillance System	SESS	19-Mar-04
10	Executive Facilities Information Tool	EFIT	9-Apr-04
11	ITSC	ITSC	30-Apr-04
12	On-Line Vehicle Interactive Management System (Increment 2)	OLVIMS	30-Apr-04
13	Reliability and Maintainability Information System (Increment 2)	REMIS	7-May-04
14	RSMS	RSMS	7-May-04
15	Aeromedical Information Waiver Tracking System	AIMWTS	21-May-04
16	Enhanced ABACUS	ABACUS	28-May-04
17	Enhanced Techdata Management Information Systems (Spiral 2)	ETIMS	7-Jun-04
18	PEPP	PEPP	11-Jun-04
19	AFRESS	AFRESS	2-Jul-04
20	ABSS	ABSS	23-Jul-04
21	SCRA	SCRA	18-Aug-04
22	Reliability and Maintainability Information System (Increment 3)	REMIS	20-Aug-04
23	Alcohol and Drug Abuse Data System	ADADS	3-Sep-04
24	IT Wellness	IT Wellness	24-Sep-04
25	Manpower Requirements Toolbox	MRT	24-Sep-04
26	DDS	DDS	24-Sep-04
27	SMART Spiral 6	SMART sp 6	TBD
28	SMART Spiral 7	SMART sp 7	TBD
29	Air Force Medical Service Knowledge Exchange	AFMS kx	TBD
30	Deployment Qualification System	DQS	TBD
31	Other War Reserve Material Requirements / Spiral 1	OWRMR	TBD

GCSS-AF Capability Enhancements

FY 04

FY 04 Planned Capabilility Enhancements	
Capability	**Status**
PureEdge Deployment - DISA Montgomery	30-Nov-03
Edge Server Implementation	31-Dec-03
EDW Decision Support Tool	31-Dec-03
Second NIPRNet Site	31-Mar-04
Air Force Portal World Wide Roll Out	15-Mar-04
SIPRNet Site	15-Mar-04
Single Sign-On (SSO) -(Active Directory / Policy Director Integration)	15-Jun-04
SAN Consolidation	31-Jul-04
Enterprise Information Management (EIM) - ESC/MM solution	15-Sep-04
Enterprise Application Integration (EAI)	15-Sep-04
Multiple Application Migration - Outreach	30-Sep-04
Reduced Sign-on Migration (RSO-Heavy) - Outreach	30-Sep-04
Enhanced Portal Capabilities - Spirals	30-Sep-04
Deployed Capability	30-Sep-04
COOP / Discover Recovery	30-Sep-04
CINC 57 Requirments Implementation	30-Sep-04
IF COTs Product Upgrade	30-Sep-04
War Fighter Initiative	30-Sep-04

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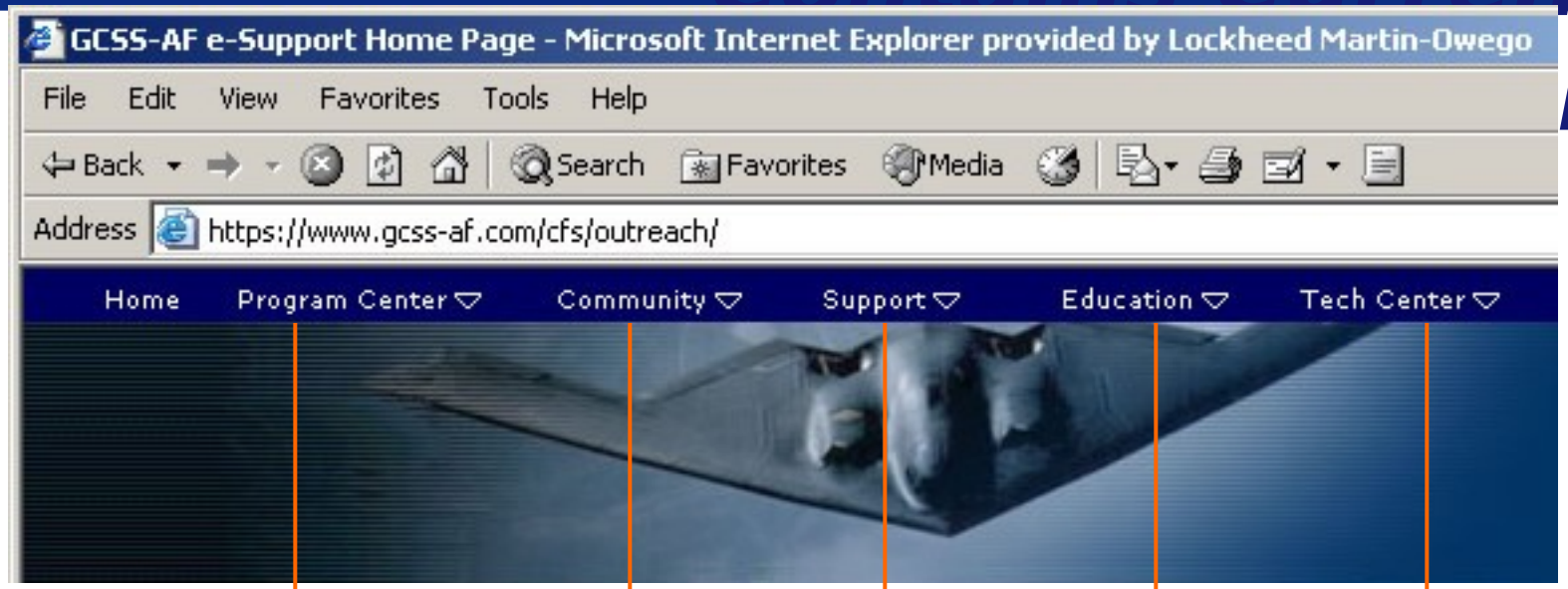
GCSS-AF.Com Website Contains Current Information



- Program Center
  - Program Mgmt >
    - Metrics
    - Organization
    - Roadmap
    - Schedules
  - Program Tools >
    - Action Tracking
    - Change Requests
    - Info Sharing
- Community
  - Discussion Forums
  - Member Lookup
  - Member Sign Up
  - Modify Profile
- Support
  - Ask it
  - FAQs
  - Surveys
  - Member Accounts
  - Update File
  - Update Messages
- Education
  - Briefings
  - Library
  - White Papers
- Tech Center
  - Component Repository
  - Getting Started
  - < IF Implementation
  - Lessons Learned
  - Tech Resources
  - Test Activities
  - UML Model

My Contact Info

Capt Matthew Kuhn
GCSS-AF Security and Test Manager
Phone: 781-377-1425 (DSN 478)
matthew.kuhn@hanscom.af.mil

Key Points of Contact

U.S. AIR FORCE

Lt Col Joe Besselman
Joe.besselman@hanscom.af.mil
781-377-7507

Mr. Joe Farinello
Joseph.farinello@hanscom.af.mil
781-377-8024

Ms. Debbie Harris
harrisd@mitre.org
781-377-7482

Mr. Scott Edwards
Scott.edwards@lmco.com
607-751-4648

Mr. John Wunder
John.wunder@lmco.com
607-751-6096

Mr. Ted Haberlein
Theodor.haberlein@hanscom.af.mil
781-377-7094

Mr. Glenn Townsend
Glenn.townsend@hanscom.af.mil
781-377-7509

Lt Col Dan Hausauer
Dan.hausauer@pentagon.af.mil
703-601-4970

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Back-ups

C4ISP

- New process coming
- Should be affordable, should be easier & should yield C4ISP's that aren't measured in pounds
- Level 4 integration with GCSS-AF will exempt programs from having to staff a C4ISP for their program
  - May need to produce some info to append GCSS-AF C4ISP

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How is data registered?

- GCSS-AF has partnered with the AF CIO and functional communities for Data Registration
- Uses DoD Discovery Metadata Service (DDMS)
  - Document that describes what you need to provide for data registration
- Functional areas will have Data Stewards (IL & FM have them)
  - Data Stewards will assist the application determine if they are the Source of Record for data and help with getting their data into the DDMS format
- They pass the record to GCSS-AF and GCSS-AF takes care of the rest

Process for GCSS-AF Level 4 Approval

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- Applications will work with outreach
  - Announce intention to run under GCSS-AF CoN/C4ISP
  - Ensure they are on target to meet criteria
- Working into the “90 day out” process
  - Ensure data registration is underway
  - Will do an interim check to ensure on the right track
  - May be several other small checks
- 30 days out need data registration information
- Once verified in Pre-Production, we will issue a statement to AFCA telling them you comply, and fall under our CoN